that have been issued in the past. Current forecasts give instead the dates after which icebreaker operations will be profitable and the dates after which they will no longer be required. These forecasts are prepared by a refined and updated version of the February mean temperature relationships that have been used for many years.

An experimental method, based on freezing degree-day and thawing degree-day concepts, is meeting with some success and gives much promise for the future. It incorporates prognostic as well as current meteorological data and predicts freezeup as well as breakup. No such method could have been proposed had not great strides been made in long-range temperature forecasting.

Detailed investigation of special problem areas, such as the Straits of Mackinac and shorelines subjected to heavy windrowing, give valuable insight into the behavior of ice and its interaction with various weather elements.

We have both the observational data and the understanding of physical processes to create a much improved ice forecasting system. Considerable progress has already been made. User requirements for ice information, both current and forecast, are changing and expanding rapidly. Weather forecasting, particularly that involving long-range temperature predictions, must provide important

input into any ice forecasting scheme. Conversely, ice information can provide significant feedback into weather forecasting.

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CORRECTION NOTICE

Vol. 97, No. 1, Jan. 1969, p. 84: 4th line after equation (20) should read "initial state, equation (19) is thus . . ."